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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/785,272	02/24/2004	Ulrich Wantig	71281	3886		
23872 75	90 08/29/2005		EXAM	EXAMINER		
MCGLEW & TUTTLE, PC			FINEMAN	FINEMAN, LEE A		
P.O. BOX 9227						
SCARBOROUGH STATION			ART UNIT	PAPER NUMBER		
SCARBOROUG	GH, NY 10510-9227		2872			
			DATE MAILED: 08/29/2005	DATE MAILED: 08/29/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/785,272	WANTIG ET AL.	· On			
Office Action Summary	Examiner	Art Unit				
	Lee Fineman	2872				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence add	dress			
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be timed within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely the mailing date of this co D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on						
·	action is non-final.					
,—	Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
 4) Claim(s) 1-20 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) Claim(s) is/are allowed. 6) Claim(s) 1-20 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or 	vn from consideration.					
Application Papers						
9)⊠ The specification is objected to by the Examine	r.					
0)⊠ The drawing(s) filed on <u>24 February 2004</u> is/are: a) accepted or b)⊠ objected to by the Examiner.						
Applicant may not request that any objection to the						
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National s	Stage			
Attachment(s)	_					
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 2/24/04 & 8/25/04. 	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate	-152)			

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, wherein the compact units are provided on the inner side of the snorkel tube (claim 4) and a third compact unit (claims 14-17) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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Specification

2. The disclosure is objected to because of the following informalities: On page 8, line 5, "optronics unit 12" should be --optronics unit 13--.

Appropriate correction is required.

Claim Objections

3. Claims 1-20 are objected to because of the following informalities:

Regarding claims 1 and 20, the claims are objected to because they include items (e.g. "(travel at periscope depth)") enclosed within parentheses that are not reference characters corresponding to elements recited in the detailed description of the drawings. Using parentheses within the claims for items other than drawing reference characters should be avoided so as to avoid confusion. The examiner suggests --during snorkeling travel at periscope depth--.

Further regarding claim 1, "the optical observation means" lacks antecedent basis.

The dependent claims inherit the deficiencies of the claims from which they depend.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-2, 4-6, 8, 14-15, 17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ambs, US 6,002,648 in view of Pratt, US 4,848,886.

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Regarding claims 1, 5 and 14, Ambs discloses in figs. 1 and 4 a snorkel device (16) for a submarine (10), wherein the snorkel device comprises: an extendible and retractable snorkel tube (16, column 4, lines 12-13) and two compact units (44 and 46) in which one comprises at least one communications means (44) and the other includes an information means (46) including one of a GPS unit and a ESM unit (column 4, lines 10-12), and wherein these compact units are provided on the extendible and retractable snorkel tube (figs. 1 and 4) for above-water use during snorkeling travel at periscope depth (figs. 1 and 4) of the submarine. Ambs discloses the claimed invention except for an optical means connected to the snorkel tube, wherein the optical means is formed as a compact unit that comprises an optronics unit; and all of the compact units including short-travel drives, which are hydraulic cylinder drives. Pratt teaches a snorkel device (1) for a submarine (3) including an optical means (39, see fig. 2) connected to the snorkel tube (16), wherein the optical means is formed as a compact unit (fig. 2) that comprises an optronics unit (in 39, column 3, lines 17-20) and a short-travel drive (10-14) which is a hydraulic cylinder drive (column 3, lines 22-23). It would have been obvious to one of ordinary skill in the art at the time the invention was made to add the optical means compact unit of Pratt to the snorkel device of Ambs to provide various observation when the submarine is submerged close below the water line (Pratt, column 1, lines 7-10). Further, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add short travel drives of Pratt to the other compact units of Ambs for lowering to provide better hydrodynamics when the units are not needed.

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Regarding claims 2, 4, 6, 8, 15 and 17, Ambs further disclose wherein the compact units are provided on the inner side of the snorkel tube (figs. 1 and 4); the snorkel tube itself being at least partly designed in a streamlined manner (fig. 1).

Regarding claim 20, Ambs discloses in figs. 1 and 4 a snorkel device (16) for a submarine (10), the device comprising: a movable snorkel tube (16, column 4, lines 12-13) movably connected to the submarine (figs 1 and 4) and movable away from the submarine (column 4, lines 12-13); and a communication arrangement (44) connected to said snorkel tube, said communication arrangement including an communications unit (44) for above-water communication during snorkeling travel at periscope depth of the submarine. Ambs discloses the claimed invention except for an optical device connected to said snorkel tube, said optical device including an optronics short-travel drive connected to said snorkel tube and an optronics unit for above-water observation during snorkeling travel at periscope depth of the submarine, said optronics short-travel drive moving said optronics unit relative to said snorkel tube to a position with said optronics unit arranged beyond an end of said snorkel tube; and a communications short-travel drive connected to said snorkel tube, said communications short-travel drive moving said communications unit relative to said snorkel tube to a position with said communications unit arranged beyond said end of said snorkel tube. Pratt teaches a snorkel device (1) for a submarine (3) including an optical device (39, see fig. 2) connected to the snorkel tube (16), said optical device including an optronics short-travel drive (10-14) connected to said snorkel tube (16) and an optronics unit (in 39, column 3, lines 17-20) for above-water observation during snorkeling travel at periscope depth of the submarine (Pratt, column 1, lines 7-10), said optronics short-travel drive moving said optronics unit relative to said snorkel tube to a position with said

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optronics unit arranged beyond an end of said snorkel tube(column 3, lines 22-30). It would have been obvious to one of ordinary skill in the art at the time the invention was made to add the optronics unit of Pratt to the snorkel device of Ambs to provide various observation when the submarine is submerged close below the water line (Pratt, column 1, lines 7-10). Further, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add a short travel drive of Pratt to the communication unit of Ambs for lowering to provide better hydrodynamics when the unit is not needed. Therefore, said communications short-travel drive will move said communications unit relative to said snorkel tube to a position with said communications unit arranged beyond said end of said snorkel tube.

6. Claims 3, 7, 9-13, 16 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ambs in view of Pratt as applied to claims 1, 2, 4, 5 and 17 above, and further in view of Wäntig et al., DE 3637618 A1.

Regarding claims 3 and 7, Ambs in view of Pratt as applied to claim 2, discloses the claimed invention except for wherein the compact units are provided on the outside of the snorkel tube; a common, streamlined casing is arranged around the snorkel tube and the compact units. Wäntig et al. teach in figs. 1-4, a compact unit (antenna) provided on the outside of the snorkel tube (abstract); a common, streamlined casing (1) is arranged around the snorkel tube and the compact units. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the units of Ambs in view of Pratt on the outside of the snorkel tube in a streamlined casing as suggested by Wäntig et al. to provide more room for electronic cables, etc.

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Regarding claims 9-13, 16 and 18-19, Ambs in view of Pratt as applied to claims 1, 2, 4, 5 and 17 above and Ambs in view of Pratt and Wäntig et al. as applied to claims 3 and 7 above disclose the claimed invention except for explicitly stating wherein the communication means includes a radio unit for HF, VHF, UHF or UHF-satcom radio communication or a combination thereof. Wäntig et al. further teach use of a UHF or VHF radio (Derwent abstract USE/ADVANTAGE). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the communication unit be a radio unit for UHF or VHF as suggested by Wäntig et al. as it is a reliable, commonly available radio unit.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Barthelat et al., US 4,447,129 and Ortelli, US 5,634,424 disclose periscope systems with multiple units and Wäntig et al. EP 1162137 A2 disclose a periscope system with a short travel drive.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lee Fineman whose telephone number is (571) 272-2313. The examiner can normally be reached on Monday - Friday 7:30 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LAF

August 25, 2005

MARK A. ROBINSON PRIMARY EXAMINER